

Notice of Allowability

Application No.

09/822,123

Examiner

Daniel J Petkovsek

Applicant(s)

ISHIBASHI ET AL.

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to supplemental amendment received September 17, 2004.
2. ☒ The allowed claim(s) is/are 30-38, 58-60 and 63-67.
3. ☒ The drawings filed on March 30, 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Brian Henry
Primary Examiner

DETAILED ACTION

This office action is in response to the supplemental amendment received September 17, 2004. In accordance with the amendment, claims 30 and 58 have been amended; claims 1-29, 39-57, 61, and 62 have been formally canceled; and new claims 63-67 have been added.

Claims 30-38, 58-60, and 63-67 are currently pending.

It is noted that an Examiner's Amendment has been made to correct a typo to new claims 64 and 65.

Allowable Subject Matter

1. Claims 30-38, 58-60, and 63-67 are allowed. The following is an examiner's statement of reasons for allowance: the relevant prior art does not teach or reasonably suggest an information receiving/display apparatus configured to receive and to display one of audio/visual information and to receive one of olfactory/gustatory/tactile information, in which the first audio/visual information is displayed by a first plurality of fibers (with associated control lines and piezoelectric elements) and the second olfactory/gustatory/tactile information is displayed by the second plurality of fibers (with second control lines and second piezoelectric elements). The closest prior art of record (Hogan U.S.P. No. 5,793,918, Lee U.S.P. No. 5,398,070) teach displaying information that is not usually displayed (smell, taste, touch, etc), but does not teach or reasonably suggest displaying this sensory information by use of two sets of a plurality of optical fibers, each with associated control lines and piezoelectric vibration elements.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments


2. Applicant's amendment to claim 58, see supplemental amendment, filed September 17, 2004, has been fully considered and is patentably distinct from the prior art of record. The rejection of claim 58 to Lee et al. '070 and Hogan '918 have been withdrawn.

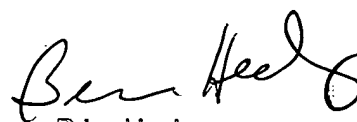
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel Petkovsek
November 5, 2004


Brian Healy
Primary Examiner

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows ([removed], added):

64. (Currently Amended) The information receiving/display apparatus according to claim [64] 58 wherein the information display plane is configured to form a projection or produce a temperature change on a surface of one of said second fibers or waveguides in response to one of said olfactory information, gustatory information, and tactile information, by propagating ultrasonic waves from an outer surface of one of said second fibers or waveguides by driving one of said second piezoelectric elements at the intersection between one of said second fibers or waveguides and one of said second control signal lines.

65. (Currently Amended) The information receiving/display apparatus according to claim [64] 58 wherein the information display plane is configured to form a projection or produce a temperature change on a surface of one of said second fibers or waveguides by means of bubbles that are generated by cavitation brought about in a liquid forming said core by propagating ultrasonic waves from an outer surface of one of said second fibers or waveguides by driving one of said second piezoelectric elements at the intersection between one of selected said second fibers or waveguides and one of said second control signal lines.

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entry
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Daniel Petkovsek
November 5, 2004



Brian Heston
Primary Examiner